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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,674	10/25/2000	Yasushi Sasagawa	FUJY 17.914	4572
7590 06/01/2004 Katten, Muchin, Zavis & Rosenman 575 Madison Ave. New York, NY 10022-2585			EXAMINER WONG, BLANCHE	
			ART UNIT 2667	PAPER NUMBER 6

DATE MAILED: 06/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,674

Applicant(s)

SASAGAWA, YASUSHI

Examiner

Blanche Wong

Art Unit

2667

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) 2-4 and 13-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,5-12,16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election of Group I (claims 1,5-12,16-22, drawn to a label switching system) in Paper No. 5 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Drawings

2. Figures 1-7 should be designated by a legend such as --Prior Art-- because only that which is old, in this case – conventional –, is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.
3. The drawings are objected to because – label – is misspelled “label” in Fig. 5-6. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claims 6-11 and 17-22** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Although these terms might be known in the art, abbreviations should be clarified in the claims.

With regard to claims 6-8 and 17-19, Applicant is recommended to clarify "final ER-HOP-TLV", "intermediate ER-HOP-TLV", "resource class TLV", "ER-TLV", "CR-LDP" embedded in the claims.

With regard to claims 9-10 and 20-21, Applicant is recommended to clarify "final Subject-object in Explicit Route Objects", "RSVP", "intermediate Subject-object in Explicit Route Objects", "an intra-system port number or an intra-system port group number in Subject-object in Explicit Route Objects".

With regard to claim 11 and 22, Applicant is recommended to clarify "intra-system other port group" in both ln. 6 and 7.

6. Claim 11 and 22 recites the limitation "one specified egress-and-ingress port group" in ln. 5. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. **Claims 1,5,12,16,11,22** are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Raj et al. (U.S. Pat No. 6,628,649).

With regard to claims 1 and 12, Raj discloses an explicit routing method (in MPLS technology, label distribution protocol and the routing protocol, such as Open Shortest Path First col. 3, ln. 3 work together to configure virtual circuits col. 4, ln. 54-56. OSPF can be used to establish and maintain routing table col. 3, ln. 29. Routing protocol and table are explicit routing method; see also IP address/label lookup table maintained by the label edge routers 153,154 and by each MPLS control processes 182 in the LSRs 160-163, col.6, ln. 49-52; see also each route controller 175-178 also maintains a label/interface table, col. 7, ln. 10; see also each LSC supports a router, col. 24, ln. 2) in a label switching system (MPLS) comprising:

a step of logically dividing (multiple LSCs 201-1 through 201-N, col. 8, ln. 46-56 and col. 9, ln. 34-35 and col. 22, 48-49; see also Fig. 9) a label switching router (LSR 200 in Fig. 6 are divided into switching control mechanism 201-1 through 201-N, col. 17, ln. 55-65) into a plurality of LSRs (LSRs 160-163 in Fig. 3; each LSR 200 includes a plurality of switched control mechanisms 201-1 through 201-N, col. 22, 48-49 and each switch control mechanism 201 is a LSC , col. 18, ln. 3-7) each having a label switching function (routing and label distribution protocol, col. 17, ln. 66-col. 18, ln. 14 and col. 20, ln. 29-34); and

a step of specifying (col. 18, ln. 22-27; col. 19, ln.64-65), when setting a label switched path on the basis of an explicit route specified, a port or a port group of an egress node (label edge routers 210,211 in Fig. 3), as recited in claim 1.

With regard to claims 5 and 16, Raj discloses an explicit routing method (in MPLS technology, label distribution protocol and the routing protocol, such as Open Shortest Path First col. 3, ln. 3 work together to configure virtual circuits col. 4, ln. 54-56. OSPF can be used to establish and maintain routing table col. 3, ln. 29. Routing protocol and table are explicit routing method; see also IP address/label lookup table maintained by the label edge routers 153,154 and by each MPLS control processes 182 in the LSRs 160-163, col.6, ln. 49-52; see also each route controller 175-178 also maintains a label/interface table, col. 7, ln. 10; see also each LSC supports a router, col. 24, ln. 2) in a label switching system (MPLS), comprising:

a step of explicitly specifying (col. 18, ln. 22-27; col. 19, ln.64-65), when setting a label switched path on the basis of an explicit route specified, a port or a port group of an egress node (label edge routers 210,211 in Fig. 3), and a port of a port group of a relay node (each intermediate node that is not an ingress or egress node is a relay node), as recited in claim 5.

With regard to claims 11 and 22, Raj discloses an explicit routing method (in MPLS technology, label distribution protocol and the routing protocol, such as Open Shortest Path First col. 3, ln. 3 work together to configure virtual circuits col. 4, ln. 54-56.

OSPF can be used to establish and maintain routing table col. 3, ln. 29. Routing protocol and table are explicit routing method; see also IP address/label lookup table maintained by the label edge routers 153,154 and by each MPLS control processes 182 in the LSRs 160-163, col.6, ln. 49-52; see also each route controller 175-178 also maintains a label/interface table, col. 7, ln. 10; see also each LSC supports a router, col. 24, ln. 2) in a label switching system (MPLS), comprising:

a step of specifying an MPLS explicit route by adding (col. 5, ln. 28-29), to an IP-over-MPLS (IP/MPLS) forwarding function (IP networks, col. 26, ln. 17) of one specified egress-and-ingress port group (a port serving both as an input and as a mechanism to out, col. 26, ln. 23-25), a communication function (fully-meshed in Fig. 12, col. 26, ln. 16-59) with the IP/MPLS forward function of an intra-system other port group, and a forwarding function (VSI-Masters and VSI-Slaves process, col. 26, ln. 30-35) to the intra-system other port group.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Birenback et al. (U.S. Pat No. 6,594,704) discloses multiple logical routers (col. 4, ln. 20).

Callon (U.S. Pat No. 5,699,347) discloses logical router topology (col. 14, ln. 3 and 7).

Callon (U.S. Pat No. 5,854,899) discloses a logical router topology in Fig. 14A.

Chuah et al. (U.S. Pat No. 6,735,190) discloses a header removal field that is a layer two switching that utilizes an appended label over the packet header.

Chuah et al. (U.S. Pat No. 6,408,001) discloses a method for determining label assignment for routers using a dual-value threshold density to determine whether packet transport density is great enough to warrant a dedicated label, a shared label, or no label at all.

Doshi et al. (U.S. 6,674,744) discloses a point-to-point data transport over the Internet utilizing label switching without IP headers. The LSRs resides within an IP network.

Gibson et al. (U.S. Pat No. 6,680,943) discloses MPLS systems connected with nodes 12,13,14 (abstract nodes).

Shew et al. (U.S. Pat No. 6,530,032) discloses a 3 layer labeling, routing, forwarding method where L1 is the cut-through path, L2 is for IP data flow, and L3 is for forwarding.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blanche Wong whose telephone number is 703-305-8963. The examiner can normally be reached on Monday through Friday, 830am to 530pm.

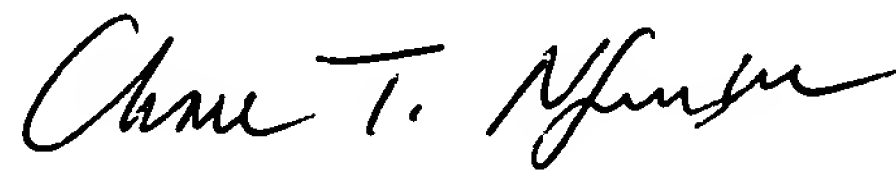
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi H Pham can be reached on 703-305-4378. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2667

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BW

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May 21, 2004



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